

Laboratory Analysis Report

Total Number of Pages: 17

Job ID : 11080217



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, <http://www.ablabs.com>

Client Project Name :
Houston Tank Farm / Houston, TX

Report To : Client Name: CGH Associates
Attn: Clark Hickman
Client Address: 16403 Havenhurst Drive
City, State, Zip: Houston, Texas, 77059

P.O.#.:
Sample Collected By: Clark Hickman
Date Collected: 08/05/11

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
TK - 1001	Water	11080217.01
TK - 1002	Water	11080217.02
TK - 1004	Water	11080217.03
TK - 7 (UNA)	Water	11080217.04
TK - 8 (UNA)	Water	11080217.05
TK - 9 (UNA)	Water	11080217.06
STF - T1	Water	11080217.07
STF - T2	Water	11080217.08
STF - T3	Water	11080217.09
STF - T6	Water	11080217.10
NTF - OT - 1	Water	11080217.11

A handwritten signature in black ink, appearing to read 'Alisha Rodriguez'.

Released By: Alisha Rodriguez
Title: Project Manager
Date: 8/8/2011



This Laboratory is NELAP (T104704213-10-2) accredited. Effective: 07/01/2010; Expires: 06/30/2011

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted.

Date Received : 08/05/2011 14:10

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 11080217

Date: 8/8/2011

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 1001

Job Sample ID: 11080217.01

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	19760	mg/L	20	200			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 1002

Job Sample ID: 11080217.02

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	48900	mg/L	100	1000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 1004

Job Sample ID: 11080217.03

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	52500	mg/L	500	5000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 7 (UNA)

Job Sample ID: 11080217.04

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	43500	mg/L	500	5000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 8 (UNA)

Job Sample ID: 11080217.05

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	52500	mg/L	100	1000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: TK - 9 (UNA)

Job Sample ID: 11080217.06

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	264000	mg/L	500	5000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: STF - T1

Job Sample ID: 11080217.07

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	326500	mg/L	500	5000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: STF - T2

Job Sample ID: 11080217.08

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	53000	mg/L	100	1000			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: STF - T3

Job Sample ID: 11080217.09

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	39400	mg/L	50	500			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: STF - T6

Job Sample ID: 11080217.10

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	42050	mg/L	50	500			08/05/11 15:46	KS

**LABORATORY TEST RESULTS**

Job ID : 11080217

Date 8/8/2011

Client Name: CGH Associates

Attn: Clark Hickman

Project Name: Houston Tank Farm / Houston, TX

Client Sample ID: NTF - OT - 1

Job Sample ID: 11080217.11

Date Collected: 08/05/11

Sample Matrix Water

Time Collected: 12:00

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SM 5220D	Chemical Oxygen Demand								
	COD	46100	mg/L	100	1000			08/05/11 15:46	KS

QUALITY CONTROL CERTIFICATE



Job ID : 11080217

Date : 8/8/2011

Analysis : Chemical Oxygen Demand **Method :** SM 5220D **Reporting Units :** mg/L

QC Batch ID : Qb11080539 **Created Date :** 08/08/11 **Created By :** Ksudha

Samples in This QC Batch : 11080217.01,02,03,04,05,06,07,08,09

Sample Preparation : PB11080533 **Prep Method :** SM 5220D **Prep Date :** 08/05/11 15:40 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
COD		BRL	mg/L	1	10	

QC Type: Duplicate

QC Sample ID: 11080123.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
COD	136	134	mg/L	1.5	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
COD	300	314	105	300	303	101	3.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11080123.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
COD	134	400	542	102						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11080217

Date : 8/8/2011

Analysis : Chemical Oxygen Demand **Method :** SM 5220D **Reporting Units :** mg/L

QC Batch ID : Qb11080540 **Created Date :** 08/05/11 **Created By :** Ksudha

Samples in This QC Batch : 11080217.10,11

Sample Preparation : PB11080533 **Prep Method :** SM 5220D **Prep Date :** 08/05/11 15:40 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
COD		BRL	mg/L	1	10	

QC Type: Duplicate

QC Sample ID: 11080125.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
COD	BRL	BRL	mg/L		20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
COD	300	314	105	300	303	101	3.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11080125.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
COD	BRL	400	398	99.5						80-120	



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1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 11080217

5. Project # Houston Tank Farm

6. Project Name/Location

Houston, TX

7. Reporting Requirement

☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT)

Clark Hickman

Sampler's Signature & Date

Clark Hickman

9. Sample ID and Description

LAB USE ONLY

10. Sampling

Date

Time

11.

Comp.

Grab

Water

Soil

Sludge

Oil

Air

Other

12. Matrix

No. of Containers

Analyses/Methods
COD

13. Containers*

15. Preservatives**

16. PH-Lab Only

17.

18. REMARKS

01A TK-1001
02A TK-1002
03A TK-1004
04A TK-7 (UNA)
05A TK-8 (UNA)
06A TK-9 (UNA)
07A STF-T1
08A STF-T2
09A STF-T3
10A STF-T6
11A STF-T6 OT-1

DATE

TIME

20. RECEIVED BY

DATE

TIME

22. KNOWN HAZARDS/COMMENTS

1 Clark Hickman

8/5/11 14:10

21. RECEIVED BY LABORATORY

8/5/11 14:10

Temperature: 33.3 °C

Intact Yes N Initials DL

*Containers: VOA - 40 ml vial

A/G - Amber/Glass 1 Liter

4 oz/8 oz - glass wide mouth

P/O - Plastic/other

**Preservatives:

C - Cool

H - HCl

N - HNO₃S - H₂SO₄

ON - NaOH

T - Na₂S₂O₃

X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY

SAMPLING

RENTAL

P/U

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days



Sample Condition Checklist

Date : 08/08/11

A&B JobID : 11080217		Date Received : 08/05/2011		Time Received : 2:10PM	
Client Name : CGH Associates					
Temperature : 33.3°C		Sample pH : N/A			
	Check Points	Yes	No	N/A	
1.	Cooler seal present and signed.		X		
2.	Sample(s) in a cooler.		X		
3.	If yes, ice in cooler.		X		
4.	Sample(s) received with chain-of-custody.	X			
5.	C-O-C signed and dated.	X			
6.	Sample(s) received with signed sample custody seal.		X		
7.	Sample containers arrived intact. (If no comment).	X			
8.	Matrix Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other : <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
9.	Sample(s) were received in appropriate container(s).	X			
10.	Sample(s) were received with proper preservative	X			
11.	All samples were logged or labeled.	X			
12.	Sample ID labels match C-O-C ID's	X			
13.	Bottle count on C-O-C matches bottles found.	X			
14.	Sample volume is sufficient for analyses requested.	X			
15.	Samples were received within the hold time.	X			
16.	VOA vials completely filled.			X	
17.	Sample accepted.	X			
Comments : Include actions taken to resolve discrepancies/problem: Samples were received above the acceptable temperature range. There are no collection times documented on the COC. Client was made aware via email of these nonconformances on 8/8/11. - ACR. Per client request, use noon as the collection time. - ACR 8/8/11.					

Received by : Dlopez

Check in by/date : Mgonzalez / 08/05/2011